

OBITUARY NOTICE

OF

PROFESSOR ALEXANDER DICKSON

READ BEFORE THE

BOTANICAL SOCIETY OF EDINBURGH.

BY

THOMAS R. FRASER, M.D., F.R.S.

PROFESSOR OF MATERIA MEDICA IN THE UNIVERSITY OF EDINBURGH.



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PROFESSOR ALEXANDER DICKSON.

BOTANICAL science sustained a great loss by the death of Alexander Dickson. During a life which extended over only fifty-one years, Dr Dickson had for nearly thirty years given his best thoughts and energies to the teaching and advancement of botany. His success in both directions has been recorded in an enduring form in contemporaneous botanical publications, and in the large number of students of botany trained by him during a quarter of a century.

Alexander Dickson was born at Edinburgh on the 21st of February 1836. He sprang from a family which at various times has given members to the legal and medical professions; one of the earliest of whom any special records exist having been John Dickson of Kilbucho and Hartree, a lawyer, who in 1649 was appointed a Senator of the College of Justice, taking the title of Lord Hartree.

Alexander Dickson received his early education at home. In 1855, he entered the University of Edinburgh as a student of medicine; and soon engaged with enthusiasm in those preliminary scientific studies which have so frequently been the occasion of the first awakenings of latent scientific impulses. In him they appear to have served this purpose. He became an enthusiastic biologist; and a warm admirer and disciple of Goodsir, in whose philosophical tendencies he found, like many of his friends, the inspiring direction that soon became so marked and characteristic a feature of his scientific work and aims. Engrossed in natural science, he took, it would seem, comparatively little interest in the purely professional or technical departments of the medical curriculum. He, however, appreciated differentiation as a means of promoting advancement in the art as well as in the science of medicine.

In his inaugural address, delivered in 1859, as a President of the Royal Medical Society, he supposes the questions, "Of what use is it for a student of medicine to know that the cranium is composed of vertebral elements—that such and such bones of the face correspond to costal arches; and that certain bones and muscles of the upper extremities correspond to other bones and muscles in the lower? Why should" his "memory be burdened with '*apophysis*' and '*epiphysis*,' when" there is "so much else to be learned of more direct importance?" And he goes on,—"To such objections it may be answered, that although morphological anatomy in its present state may be of little *practical* importance to the medical man, yet this is no reason why he should not study it. It must be at once apparent that, from the nature of homological anatomy, one of the great ends which it is destined to accomplish is a simplified teaching of descriptive anatomy, by a logical and intelligible arrangement and generalisation of the enormous mass of facts with which the anatomical student has to contend; and this can only be attained to by the development and perfecting of homological anatomy, by which alone a philosophical classification of anatomical details can be rendered possible. Such being the case, all doubt as to the utility of homological anatomy must be thrown aside. Its study must surely be of importance, if it enables anyone to assist, however slightly, in promoting so good an end. The medical man, while he performs his duties to his suffering fellow-creatures, ought never to forget at the same time what he owes to medical science and to posterity."

Dr Dickson graduated as doctor of medicine in August 1860, having previously, in accordance with his biological proclivities, studied under Kölliker in Würzburg and Virchow in Berlin.

His career as a teacher of botany began in the summer of 1862, when he conducted the class of botany in the University of Aberdeen for Professor Dickie, who was at the time incapacitated by bad health. He thus obtained an opportunity for displaying his merits as a teacher; and his success proved of much value in securing for him in 1866 the chair of Botany in the University of Dublin.

Two years afterwards he was appointed Professor of Botany in the University of Glasgow, where he confirmed his early reputation as a clear and painstaking teacher and an enthusiastic worker in structural and morphological botany.

Dr Dickson remained in Glasgow from 1866 till 1879. In the latter year, the professorship of botany in the University of Edinburgh became vacant, on the resignation, caused by failing health, of the renowned and veteran Professor Balfour; and to this great botanical position, Dr Dickson was promoted by the Curators. In the following year, he received from the Crown also the appointment of *Regius* Professor of Botany to the University of Edinburgh, as well as that of *Regius* Keeper of the Royal Botanic Garden.

It is with his work as a professor in Edinburgh that the members of this Society are most familiar. The recollection of that work is still so vividly present among us, that but for the requirement of a historical record it would be needless to dwell on it. We find him entering on his duties imbued with the same conception of the far-reaching affinities between science and art or practice as was recognised in the early developments of his biological career. In his inaugural address he adopted for his subject the consideration of some remarkable parallels between the animal and vegetable kingdoms as regards specialisation of form for the performance of different functions. For this purpose he compared a flowering plant with a zoophyte, and showed how unity of organisation is manifest throughout nature. The same lesson was indicated as, twenty years before, he had taught in his inaugural address to the Royal Medical Society:—that the cultivation of every department of biological science increases the knowledge of that human anatomy which is the foundation of the art of medicine and surgery.

His relations with the students of the university soon became of the most cordial description. His painstaking earnestness as a teacher, his obvious desire to further their botanical studies, the knowledge that soon spread of the hours spent in preparation for his class, and especially in the preparation of the wonderfully skilful and instructive illustrations that from day to day appeared on the blackboard, and the numberless evidences of his generous and courteous

disposition, gained for him, not only respect, but also warm and grateful affection.

Professor Dickson's first botanical paper was published in 1857, while he was yet a student of medicine. During the following twenty-nine years, his activity as a worker was shown by the publication of upwards of fifty papers. Many of them rank as masterpieces of accurate and elaborate description, and of philosophical conceptions of structure. A glance over the appended list shows his great partiality for subjects bearing on development and morphology, in which departments of botany he acquired the position of an eminent authority. In confirmation of these statements, it is sufficient to cite his graduation thesis (for which he obtained a gold medal) "On the Development of the Flower, and especially the Pistil, in the *Caryophyllaceæ*," and his papers on the Morphology of the Reproductive Organs of the *Coniferae*, on the Embryo and its Appendages in *Tropaeolum*, on the Embryology and Development of the Flower of *Pinguicula*, on the Spiral Arrangements of the Cones of *Pinus pinaster*, and on the Morphology and Structure of the Pitchers in *Cephalotus* and *Nepenthes*.

On account of his eminence as a botanist and teacher, he was made honorary M.D. of the University of Dublin, LL.D. of the University of Glasgow, Fellow of the Linnæan Society, and President of the Botanical Society of Edinburgh.

Professor Dickson took much interest in matters outside of his immediate professorial duties and scientific pursuits. He was a Conservative in State and Church politics. On various occasions he actively supported candidates for parliamentary representation. A consistent Free Churchman, he remained true to the original position of that Church, and opposed publicly the policy which an influential majority had adopted, of reversing its traditions on the question of a State-recognised and State-supported Church. He strenuously opposed the legislative attempts, which fortunately proved abortive, to modify the special characters of medical education and graduation in the Scottish universities for the mere sake of bringing them into harmony with the systems prevailing in the southern division of the United Kingdom. He looked with much distrust on the schemes, embodied in the

various Bills introduced into Parliament during the last seven years, for effecting fundamental changes in the constitution and character of the Scottish universities; considering them prompted more by political, social, and selfish aims, than by a real and disinterested desire for educational reform. If it were possible for one so charitable and generous to entertain any feeling of resentment, that feeling was approached in the indignation with which he regarded many of the statements of the extreme section of agitators for university legislation. Even when he found himself in a hopeless minority—as occasionally happened in the discussions on this question,—he still courageously maintained and expressed the views he had deliberately adopted.

Polemical discussion, however, was not congenial to his fair and candid disposition. When not engaged in teaching or in the botanical investigations to which he was so ardently attached, his occupations as proprietor of Hartree and Kilbucko, and social intercourse with his friends, were more in accordance with his tastes.

It has been well said that, as a country laird, “his one aim in life was to make others happy.” And the same characteristics made him also a general favourite in society; where he used to delight his friends by the exquisite taste and feeling with which he played on the piano the works of Beethoven and Bach, and the national airs of Scotland.

His social charms were never more pleasantly exhibited than when he was entertaining his friends at his country house. They were made to feel as if the place belonged to them, and not to him; except that every now and then the host was recognised by his kindly interpositions to increase the comfort and enjoyment of his guests. *His* delight was to know that they had been gratified with the day’s shooting or curling, or with the ramble over hills or through the woods, where some matter of botanical interest was invariably brought under notice; *their* delight was the companionship and conversation of an acute and widely-informed man, genial and destitute of envy, self-denying and careful to avoid wounding susceptibilities, and appreciating heartily what was good in others, because desirous of doing so.

No one could have guessed that beneath this never-

ceasing genial and amiable placidity and kindness, a consciousness existed of a physical ailment, whose course and effect could not with certainty be anticipated for a day, nor even for an hour. It is characteristic of the man, that he courageously and considerably concealed all knowledge of the existence of this "thorn in the flesh," in order to avoid causing anxiety and pain to those nearest and dearest to him. He succeeded in his purpose; and when, on the 30th of December 1887, he suddenly expired on the curling pond at Hartree, no forebodings or anxieties had occurred to increase the bitter grief of his departure.

In concluding this record of a dear friend, I would remind the Society how warmly he was attached to its interests. He constantly attended its meetings, served it as President and in some of its other offices, and communicated to it the greater number of his botanical papers.

Chronological List of Scientific Papers.

- On a Monstrosity in the Fruit of *Silene inflata*, with some Remarks on Placentation. *Trans. Bot. Soc. Edin.*, v., 1857.
- On the Compound Nature of the Cormophyte. *Trans. Bot. Soc. Edin.*, vi., 1858; *Edin. New Phil. Jour.*, 1858.
- Remarks on the Development of the Seed-Vessel of Caryophyllaceæ. *Trans. Bot. Soc. Edin.*, vi., 1859. (The substance of this paper forms part of the author's graduation thesis, "On the Development of the Flower, and especially the Pistil, in the *Caryophyllaceæ*.")
- Observations on some Bisexual Cones occurring in the Spruce Fir (*Abies excelsa*). *Trans. Bot. Soc. Edin.*, vi., 1860; *Edin. New Phil. Jour.*, 1860; *Adansonian*, ii.
- Translation of Baillon's Organogenic Researches on the Female Flower of the Coniferæ. *Trans. Bot. Soc. Edin.*, vii., 1861.
- Note upon the preceding Translation, with Observations upon the Morphological Constitution of certain Abietineous Cones. *Trans. Bot. Soc. Edin.*, vii., 1861; *Edin. New Phil. Jour.*, 1861; *Adansonian*, ii.
- On some of the Stages of Development in the Female Flowers of *Dammara australis*. *Ibid.*
- Observations on the Embryogeny of *Tropæolum majus*. *Trans. Bot. Soc. Edin.*, vii., 1862; *Edin. New Phil. Jour.*, 1863.

- On Diplostemenous Flowers, with some Remarks upon the Position of the Carpels in the Malvaceæ. *Trans. Bot. Soc. Edin.*, viii., 1864; *Edin. New Phil. Jour.*, 1864; *Adansonia*, iv.
- Note on the Position of the Carpellary Groups in *Malope* and *Kitaibelia*. *Trans. Bot. Soc. Edin.*, viii., 1864.
- On the Morphological Constitution of the Andrœcium of *Mentzelia*, and its analogy with that of certain Rosaceæ. *Trans. Bot. Soc. Edin.*, viii., 1865; *Seeman's Jour. of Bot.*, iii., 1865.
- Opening Address to the Botanical Society of Edinburgh for Session 1865-6. *Trans. Bot. Soc. Edin.*, viii., 1865.
- On the Phylloid Shoots of *Sciaelopitys verticillata*, Sieb. and Zucc. (Read before the Botanical Congress, London, 1866.) *Seeman's Jour. of Bot.*, iv., 1866.
- On the Staminal Arrangements in some Species of *Potentilla* and in *Nuttallia cerasiformis*. *Trans. Bot. Soc. Edin.*, viii., 1866; *Jour. of Bot.*, iv., 1866.
- On Abnormal Flowers in *Tropæolum majus*. *Trans. Bot. Soc. Edin.*, ix., 1866.
- Notice of an Abnormal Leaf of *Prunus Laurocerasus*. *Jour. of Bot.*, v., 1867.
- On some of the Principal Modifications of the Receptacle, and their Relation to the "Insertion" of the Leaf-organs of the Flower. *Report Brit. Assoc.*, 1868.
- On the Development of the Flower of *Pinguicula vulgaris*, L., with Remarks on the Embryos of *P. vulgaris*, *P. grandiflora*, *P. lusitanica*, *P. caulata*, and *Utricularia minor*. *Trans. Roy. Soc. Edin.*, xxv., 1869; *Proc. Roy. Soc. Edin.*, vi., 1869.
- Note on the Embryo of *Ruscus aculeatus*. *Jour. of Bot.*, viii., 1870; *Trans. Bot. Soc. Edin.*, x., 1870.
- Note on the Embryo of *Zostera*. *Ibid.*
- Note on the Embryo of the Date Palm. *Ibid.*
- On the Phyllotaxis of *Lepidodendron* and *Knorria*. *Jour. of Bot.*, ix., 1871; *Trans. Bot. Soc. Edin.*, xi., 1871.
- Notice of Exhibition of Vegetable Spirals (chiefly Fir Cones and Cacti). *Proc. Roy. Soc. Edin.*, vii., 1871.
- On some Abnormal Cones of *Pinus Pinaster*. *Trans. Roy. Soc. Edin.*, xxvi., 1871.
- Suggestions on Fruit-classification. *Jour. of Bot.*, ix., 1871.
- Note on Germination of *Delphinium*. *Ibid.*, x., 1872.
- On Consanguineous Marriages viewed in the light of Comparative Physiology, &c. Introductory Lecture delivered at the Opening of the Medical Session, 1871-2, in the University of Glasgow. *Glasg. Med. Jour.*, N.S., iv., 1872.

- Note on *Stigmaria* from the Fossiliferous Strata at Auchentorlie. *Report Brit. Assoc.*, 1872.
- Note on an Abnormality of *Chrysanthemum Léucanthemum*. *Nature*, x.; *Report Brit. Assoc.*, 1874.
- Note on an Abnormality of *Primula vulgaris*, with Interpetaline Lobes. *Report Brit. Assoc.*, 1875; *Trans. Bot. Soc. Edin.*, xii., 1875.
- Note on a Monstrosity of *Saxifraga stellaris*. *Ibid.*
- On the Embryogeny of *Tropæolum peregrinum*, L., and *Tropæolum speciosum*, Endl. and Pœp. *Trans. Roy. Soc. Edin.*, xxvii., 1875.
- Note on Two Monstrosities of *Matricaria inodora*. *Report Brit. Assoc.*, 1876.
- Note on Laticiferous Canals in Fruit of *Limncharis Plumieri*. *Ibid.*
- Note of Exhibition of Specimen of *Pogonatum alpinum* with two Capsules under one Calyptra. *Ibid.*
- On the Structure of the Pitcher of *Cephalotus follicularis*. *Jour. of Bot.*, xvi., 1878.
- Note on the Stipules of *Spergularia marina*. *Report Brit. Assoc.*, 1878; *Jour. of Bot.*, xvi., 1878.
- Note on the Inflorescence of *Senebiera didyma*. *Ibid.*
- Note on the Six-celled Glands of *Cephalotus*, and their Similarity to the Glands of *Sarracenia purpurea*. *Ibid.*
- Note on Exhibition of Specimens of *Isoëtes echinospora*. *Report Brit. Assoc.*, 1878.
- On Functional Specialisation of Individuals in Animals and Plants, with particular reference to Analogies between the Sertularian Zoophyte and the Flowering Plant. *Trans. Bot. Soc. Edin.*, xiii., 1879.
- On the Septa across the Ducts in *Bongainvillea glabra* and *Testudinaria elephantipes*. *Trans. Bot. Soc. Edin.*, xiv., 1879.
- On the Morphology of the Pitcher of *Cephalotus follicularis*. *Jour. of Bot.*, xix., 1881; *Gardeners' Chronicle*, 1881.
- On the Germination of *Streptocarpus caulescens*. *Trans. Bot. Soc. Edin.*, xiv., 1882; *Gardeners' Chronicle*, 1882.
- On the Æstivation of the Floral Envelopes of *Helianthemum vulgare*. *Ibid.*
- On a Monstrosity in the Flower of *Iris Pseudacorus*. *Ibid.*
- On a Plant of *Primula vulgaris* with a Green Corolla. *Trans. Bot. Soc. Edin.*, xiv., 1882.
- On the Germination of *Podophyllum Emodi*. *Gardeners' Chronicle*, 1882; *Trans. Bot. Soc. Edin.*, xvi., 1885.

- On the Occurrence of Foliage-leaves in *Ruscus* (*Semele*) *androgynus*; with some Structural and Morphological Observations. *Gardeners' Chronicle*, 1883; *Trans. Bot. Soc. Edin.*, xvi., 1885.
- On the Structure of the Pitcher in the Seedling of *Nepenthes*, as compared with that in the Adult Plant. *Gardeners' Chronicle*, 1883; *Proc. Roy. Soc. Edin.*, xii., 1883-4.
- Note on Hybrid Hedychiums. *Gardeners' Chronicle*, 1884.
- On the Development of Bifoliar Spurs into Ordinary Buds in *Pinus sylvestris*. *Trans. Bot. Soc. Edin.*, xvi., 1885; *Gardeners' Chronicle*, 1885.
- On Certain Points in the Morphology of *Frullania* and some other Leafy Jungermanniæ. *Trans. Bot. Soc. Edin.*, xvi., 1886.

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